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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/389,393	09/03/1999	HISASHI OHTANI	07977/204002	5375

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EXAMINER

JACKSON JR, JEROME

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

874

Office Action Summary	Application No. 09/389,393	Applicant(s) OHTANI, HISASHI	
	Examiner Jerome Jackson Jr.	Art Unit 2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,44,45,47,48,55-57,59-63,65-69,71-75,77-81,83 and 84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,44,45,47,48,55-57,59-63,65-69,71-75,77-81,83 and 84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/22/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2815

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1,44,45,47,48,55-57,59-63,65-69,71-75,77-81,83,84 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no antecedent basis in the original disclosure for a "back-gate" device having the structure claimed.

The last paragraph in the specification reciting "the present invention can be applied to a bottom gate type transistor in which a gate electrode is located below the channel forming region" does not support the new matter structure recited in all of the claims. There is no description in the original disclosure of exactly what the structure of such a "bottom-gate" device would be, particularly in view of how one would arrange such a bottom-gate below the channel and over a substrate with off-set regions other layers, etc., and how would one make such a device, etc. The language of the present claims is not in the original disclosure. Moreover, there is no way to discern what a back-gate device would either look like or how it would be made without "undue experimentation" or reciting unoriginally disclosed language as in the present claims. See also the previous rejections concerning new matter. Any recitation of "bottom-gate" in any claim will necessitate a 35 USC 112 1st paragraph rejection.

Claims 1,44,45,47,48,55-57,59-63,65-69,71-75,77-81,83,84 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In addition to the new matter rejection above, applicant's "back-gate" device is not enabled as there is no way to discern how to make such a device without undue experimentation. The bare statement in the last paragraph of the specification is not enabling as it is not a mere matter of turning the device upside down and labeling it a back-gate" device as a "back-gate device" implies that the gate is between a substrate and the channel region and it takes invention to put all the structure together to make a "back-gate" device. The recitation "below the channel region" is not enabling for a bottom-gate device as this is not enough description for enabling a back-gate device considering there is no way to discern where or how all the layers of the device are disposed once the gate is "below" the channel. No blueprint for a back-gate device is given in the original disclosure and it is not evident without undue experimentation from the description of a "front-gate" device. Applicant has enablement for a front -gate device but not a back-gate device. Such recitation of "back-gate" here necessarily needs a description and full disclosure of the inventive exact structure because off-set regions, anodization layers, dopant layers, or other structure is disclosed or claimed and there is no enablement for a bottom-gate" device. Any recitation of "bottom-gate" in the claims will necessitate a 35 USC 112 1st paragraph rejection. There is no enablement for any "bottom-gate" structure here.

Claims 61-63,65,66 are objected to because of the following informalities: there are double recitations. Appropriate correction is required.

Applicant's arguments filed 3/17/05 have been fully considered but they are not persuasive. Contrary to applicant's remarks, there is no support for the present claim language. There is no original description for a bottom gate device with the structure claimed. There is only original recitation of "a bottom-gate transistor in which a gate electrode is located below the channel forming region". Any further structural language such as the language of the present claims is new matter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Jackson Jr. whose telephone number is 571 272 1730. The examiner can normally be reached on t-th 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571 272 1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JEROME JACKSON
PRIMARY EXAMINER